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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,485	03/12/2004	John Watt	041A.00010.U1(US)	8396
29683	7590	01/19/2006	EXAMINER	
HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212			CARRILLO, BIBI SHARIDAN	
			ART UNIT	PAPER NUMBER
			1746	
DATE MAILED: 01/19/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Am

Office Action Summary	Application No. 10/799,485	Applicant(s) WATT, JOHN	
	Examiner Sharidan Carrillo	Art Unit 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-6,11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 11 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitations of cleaning the oil scavenge tube "while the gas turbine is not operational" constitutes new matter, the limitations of which are not supported by the specification as originally filed.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 4-6 and 11-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because the term "cleaning fluid" lacks positive antecedent basis. Claim 1 is further indefinite because it is unclear whether "air" refers to compressed air. Claim 12 is indefinite because it is unclear the structural relationship between the turbine rear frame and the low pressure turbine.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1, 4-6, and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monteath (3350223) in view of Awad (US2004/0065347).

Monteath Jr. teaches cleaning cooling systems of internal combustion engines using a mobile cleaning device 10. In col. 8 and col. 9 bridging, Monteath teaches connecting the hoses of the device 10 to the engine block and radiator. Monteath teaches flowing air (col. 8, lines 68-70) followed by pumping hot alkali cleaning solution, ceasing the flow of the alkali solution, followed by purging with air, then water, ceasing the water flow and then purging with air. The hoses are then disconnected.

Monteath teaches cleaning engine parts of automobiles, but fails to teach an oil scavenge tube of a gas turbine engine. Monteath further fails to teach connecting two

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flexible hoses to the tube, such that fluid circulates through the hoses from the mobile flushing unit.

Awad teaches a method of flushing and cleaning engine lubrication systems. In Figs. 2-3, Awad teaches a mobile flushing unit 10 having an inlet flexible hose 206 and an outlet flexible hose 204 connected to an engine 300 for flushing cleaning fluid throughout in order to flush the lubrication system of an engine (paragraphs 2, 56, 65, and 37).

It would have been obvious to modify the method of Monteath to include two flexible hoses, as taught by Awad, for purposes of circulating cleaning fluid throughout the internal components of the engine. Monteath in view of Away fails to teach cleaning an oil scavenge tube. The examiner considers an oil scavenge tube to be merely a lubricating component of an engine. It would have been well within the level of the skilled artisan to modify the method of Monteath to include cleaning oil scavenge tubes since Awad teaches cleaning lubrication systems of an engine and the examiner considers an oil scavenge tube to be a lubricant component of a engine. Additionally, it would have been within the level of the skilled artisan to have modified the method of Monteath to include cleaning oil scavenge tubes since oil scavenge tubes are engine components and further since both Monteath and Awad teaches using the portable device to clean engine components.

In reference to claim 5, refer to col. 8, lines 68-70 of Monteath. In reference to claim 6, refer to col. 3, lines 58-60 of Monteath. In reference to claim 11, refer to col. 6, lines 4-5 of Awad. In reference to claim 12, it would have been well within the level of

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the skilled artisan to disassemble any component of an engine and flush by connecting the hose of the portable cleaning system to a component and flushing cleaning solution therethrough. Additionally, applicant's own specification on page 2 teaches that it is conventional and well known in the art to strip the turbine rear frame, including the oil scavenge tube, off the low pressure module for cleaning.

In reference to cleaning a component of a gas turbine, it would have been within the level of the skilled artisan to apply the teachings of Monteath and Awad to cleaning gas turbines because 1) gas turbines include internal combustion engines, 2) gas turbines are analogous to internal combustion engines since they are both combustion engines, and 3) Awad teaches a method of cleaning engines which would include internal combustion engines as well as gas turbine engines.

Response to Arguments

8. The rejection of the claims as being unpatentable over Monteath in view of Bartos is withdrawn in view of the newly amended claims. Therefore, all arguments directed to Bartos are deemed moot since Bartos is no longer relied upon.

9. Applicant argues that Monteath teaches cleaning a cooling system of an internal combustion engine of an automobile and fails to teach cleaning an oil scavenge tube of a gas turbine. Applicant's arguments are unpersuasive for the reasons set forth above. Applicant further argues that Monteath fails to teach connecting the hoses to each end of the oil scavenge tube such that the fluid circulates. The limitations of connecting flexible hoses and circulating the fluid are met by the teachings of Awad.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Williams teaches a vehicle cooling system. Juniper teaches washing gas turbine engines. Waddington et al. and Hodgins teach purging gas turbine engines. Suratt et al. teach an engine cleaning process. Hoke teaches cleaning engine cooling systems. Buongiorno teaches cleaning gas turbine engines. Grigorian et al. teach flushing engines. Butler teaches cleaning gas turbine engines.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharidan Carrillo whose telephone number is 571-272-1297. The examiner can normally be reached on M-W 6:30-4:00pm, alternating Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sharidan Carrillo
Primary Examiner
Art Unit 1746

bsc



SHARIDAN CARRILLO
PRIMARY EXAMINER